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Issuance Date: June 8, 2016 Effective Date: July 1, 2016 Expiration Date: June 8, 2021

# National Pollutant Discharge Elimination System Waste Discharge Permit No. WA0001791

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 160<sup>th</sup> Avenue SE
Bellevue, WA 98008-5452

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act

The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq.

#### Shell Oil Products US - Seattle Distribution Terminal

2555 13<sup>th</sup> Avenue Southwest Seattle, WA 98134

is authorized to discharge in accordance with the Special and General Conditions that follow.

Facility Location:

2555 – 13<sup>th</sup> Avenue SW Seattle, WA 98134

<u>Treatment Type</u>: Oil water separation, cartridge filtration, granulated activate carbon treatment

Industry Type: Bulk Petroleum Storage and

Distribution

SIC Code: 5171

NAICS Code: 424710

Receiving Water:

Duwamish River, West Waterway

Discharge Location:

Outfall 001:

Latitude: 47.58°N

Longitude: 122.351111°W

Outfall 002:

Latitude:

47.581111°N

Longitude: 122.353611°W

Kevin C. Fitzpatrick

Water Quality Section Manager

Northwest Regional Office

Washington State Department of Ecology

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### Summary of permit report submittals

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report (DMR)	Monthly	August 28, 2016
3S.A	Discharge Monitoring Report (DMR)	Quarterly	October 28, 2016
S3.F	Reporting Permit Violations	As necessary	
S4.A	Operations and Maintenance Manual		
S4.A.c	Treatment System Operating Plan	1/permit cycle	December 8, 2019
S4.B	Reporting Bypasses	As necessary	
S6	Application for Permit Renewal	1/permit cycle	December 8, 2019
S7	Non-Routine and Unanticipated Discharges	As necessary	
S8	Spill Plan	1/permit cycle, updates submitted as necessary	
S9.1	Updated Stormwater Pollution Prevention Plan	First year of permit	October 15, 2016
S9.2	Updated Stormwater Pollution Prevention Plan	Last year of permit	December 8, 2019
S12	Acute Toxicity Effluent Test Results - Submit with Permit Renewal Application	Once	December 8, 2019
S13	Chronic Toxicity Effluent Test Results with Permit Renewal Application	Once	December 8, 2019
S14.1.	Compliance Schedule for Outfall 002 – AKART Study	1/permit cycle	January 31, 2018
S14.2	Compliance Schedule for Outfall 002 – Engineering Report	1/permit cycle	July 31, 2018
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G10	Duty to Provide Information	As necessary	
G21	Compliance Schedules	As necessary	

#### Special conditions

#### S1. Discharge limits

#### S1.A. Process wastewater discharges

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated wastewater to the West Waterway of the Duwamish River at the permitted location subject to complying with the following limits:

EFFLUENT LIMITS: Outfall 001 - Main Oil Water Separator						
Parameter Outfall Average Monthly <sup>a</sup> Maximum Daily <sup>b</sup>						
pH	001	001 Between the range of 6 and 9 standard units				
Oil and Grease 001 10 mg/L 15 mg/L						
Oily sheen	001	No oily sheen				
Total Suspended Solids (TSS)	SS) 001 21 mg/L 33		33 mg/L			
Zinc (as Total)	001		95 μg/L			

Benchmarks: Outfall 001 - Main Oil Water Separator				
Parameter Outfall Benchmark Value				
Copper (as Total)	001	14 μg/L		
Lead (as Total)	001	81.6 μg/L		
Turbidity	001	25 NTU		

EFFLUENT LIMITS: Outfall 002 - Oil Water Separator (OWS)  Located South of the Western Truck Entrance						
Parameter Outfall Average Monthly <sup>a</sup> Maximum Daily <sup>b</sup>						
pH	pH 002 Between the range of 6 and 9 standard units					
Oil and Grease	002	10 mg/L 15 mg/L				
Oily sheen	002	No oily sheen				

Beginning on July 1, 2019 (3 years after issuance date), the Permittee is authorized to discharge treated wastewater to the west Waterway of the Duwamish River at Outfall 002 subject to complying with the following benchmarks.

Benchmarks: Outfall 002 - OWS Located South of the Western Truck Entrance			
Parameter	Benchmark Value		
Copper (as Total)	002	14 μg/L	
Zinc (as Total)		117 μg/L	
Turbidity	002	25 NTU	

- Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of days in the month.
- b Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH or temperature.
- c If any of the benchmark values are exceeded in a quarter, the Permittee must proceed with the corrective actions as laid out in S11.

#### **S2.** Monitoring requirements

#### S2.A. Monitoring schedule

The Permittee must monitor in accordance with the following schedule and the requirements specified in *Appendix A*.

requirements specified in <i>Appendix A</i> .					
Parameter	Units	Minimum Sampling Frequency	Sample Type		
Outfall 001: Main oil/water sample point is defined as	r separator (OWS) after the last cham	located southeast of the ber of the main oil water	e facility. The final effluent separator.		
Flow	gpd	Weekly	Meter or estimate		
pH <sup>3</sup>	Standard Units	Weekly	Calibrated pH meter		
Oily Sheen	N/A	Batch	Visual Inspection		
Oil and Grease	mg/L	Monthly	Grab <sup>1</sup>		
Biochemical Oxygen Demand (5-day)	mg/L	Monthly	24-hour Composite <sup>4</sup>		
TPH-G	μg/L	Quarterly	Grab <sup>1</sup>		
BTEX	μg/L	Quarterly	Grab <sup>1</sup>		
TSS	mg/L	Quarterly <sup>5</sup>	Composite <sup>2</sup>		
Turbidity	NTU	Quarterly <sup>5</sup>	Grab <sup>1</sup>		
Lead (Total)	μg/L	Quarterly <sup>5</sup>	Grab <sup>1</sup>		
Zinc (Total)	μg/L	Quarterly <sup>5</sup>	Grab <sup>1</sup>		
Copper (Total)	μg/L	Quarterly <sup>5</sup>	Grab <sup>1</sup>		
Acute Toxicity Testing	N/A	December 8, 2019	See Special Condition S11		
Chronic Toxicity Testing	N/A	December 8, 2019	See Special Condition S12		
defined as the clear well of	the last chamber of NS at all times. No	of the OWS. An oil abso	final effluent sample point is rbent pad must be placed in y for reporting periods during		
Flow	gpd	Weekly	Meter, or estimate		
Oily Sheen	N/A	Weekly	Visual Inspection		
Oil and Grease	mg/L	Monthly	Grab		
pH <sup>3</sup>	Standard Units	Monthly	Grab		
Beginning on the effective date of the permit to December 31, 2017, the monitoring schedule for the following parameters is monthly.  Beginning on January 1, 2018, to the expiration date of the permit, the monitoring schedule for the following parameters is quarterly.					
Copper (as total) µg/L Monthly/Quarterly <sup>5</sup> Grab <sup>1</sup>					
Zinc (as total)	μg/L	Monthly/Quarterly 5	Grab <sup>1</sup>		
Turbidity	NTU	Monthly/Quarterly 5	Grab <sup>1</sup>		

- <sup>1</sup> Grab means an individual sample collected over a fifteen (15)-minute, or less, period.
- <sup>2</sup> The sampling method for TSS must be a composite of four aliquots taken at two hour intervals on each sampling day.
- <sup>3</sup> Permittees must use a calibrated pH meter.
- <sup>4</sup> 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- <sup>5</sup> The Permittee may sample more than once per quarter, and average the sample results for each parameter. However, if the Permittee collects more than one sample during a 24-hour period, the Permittee must first calculate the daily average of the individual grab sample results collected during the 24-hour period, then use the daily average to calculate a quarterly average.

#### S2.B. Sampling and analytical procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapters N [Parts 400–471] or O [Parts 501-503]) unless otherwise specified in this permit. Ecology may only specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

#### S2.C. Flow measurement, and field measurement monitoring devices

The Permittee must:

- 1. Select and use appropriate flow measurement, field measurement monitoring devices and methods consistent with accepted scientific practices.
- 2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the waste stream.
- 3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
- 4. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.
- 5. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
- 6. Maintain calibration records for at least three years.

#### S2.D. Laboratory accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement.

#### S3. Reporting and recording requirements

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

#### S3.A. Discharge monitoring reports

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

- 1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.
  - To find out more information and to sign up for the Water Quality Permitting Portal go to: <a href="http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html">http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html</a>
- 2. Enter the "No Discharge" reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
- 3. Report single analytical values below detection as less than the detection level (DL) by entering "<" followed by the numeric value of the detection level (e.g. "< 2.0") on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
- 4. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in *Appendix A*.
- 5. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
  - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
  - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
  - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
- 6. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary). The Permittee must also submit an electronic copy of the laboratory report as an attachment using WQWebDMR. The contract laboratory reports must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter.
- 7. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.

- 8. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
  - a. Submit **monthly DMRs**, unless otherwise specified in the permit, by the 28<sup>th</sup> day of the month following the monitoring period.
  - b. Submit **quarterly** DMRs by the 28<sup>th</sup> of the following monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must submit the first quarterly DMR on October 28, 2016.

#### S3.B. Permit submittals and schedules

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all other written permit-required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard-copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

Water Quality Permit Coordinator Department of Ecology Northwest Regional Office 3190 160<sup>th</sup> Avenue SE Bellevue, WA 98008-5452

#### S3.C. Corrective action annual reports

- 1. The Permittee must submit a complete and accurate annual report to Ecology no later than May 15<sup>th</sup> of each year using Ecology's Water Quality Permitting Portal Permit Submittals application unless no benchmark values have been exceeded and corrective actions are not required.
- 2. The annual report must include corrective action documentation as required in S11.B-D. If corrective action is not yet completed at the time of submission of this annual report, the Permittee must describe the status of any outstanding corrective action(s).
- 3. Permittees must include the following information with each annual report. The Permittee must:
  - a. Identify the condition triggering the need for corrective action review.
  - b. Describe the problem(s) and identify the dates they were discovered.
  - c. Summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.
  - d. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.
- 4. Permittees must retain a copy of all annual reports outside for Ecology review.

#### S3.D. Records retention

The Permittee must retain records of all monitoring information for a minimum of three (3) years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

#### S3.E. Recording of results

For each measurement or sample taken, the Permittee must record the following information:

- 1. The date, exact place, method, and time of sampling or measurement.
- 2. The individual who performed the sampling or measurement.
- 3. The dates the analyses were performed.
- 4. The individual who performed the analyses.
- 5. The analytical techniques or methods used.
- 6. The results of all analyses.

#### S3.F. Additional monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR unless otherwise specified by Special Condition S2.

#### S3.G. Reporting permit violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- 2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

#### a. Immediate reporting

Ecology's Northwest Regional Office

425-649-7000

#### b. Twenty-four-hour reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- i. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
- ii. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S4.B., "Bypass Procedures").

- iii. Any upset that causes an exceedance of an effluent limit in the permit (See G.15, "Upset").
- iv. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
- v. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit. This requirement does not include industrial process wastewater overflows to impermeable surfaces which are collected and routed to the treatment works.

#### c. Report within five days

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under subparts a or b, above. The report must contain:

- i. A description of the noncompliance and its cause.
- ii. The period of noncompliance, including exact dates and times.
- iii. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
- iv. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- v. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

#### d. Waiver of written reports

Ecology may waive the written report required in subpart c, above, on a case-by-case basis upon request if the Permittee has submitted a timely oral report.

#### e. All other permit violation reporting

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in subpart c, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

#### S3.H. Other reporting

#### a. Spills of oil or hazardous materials

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of RCW 90.56.280 and chapter 173-303-145. You can obtain further instructions at the following website: <a href="http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm">http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm</a>.

#### b. Failure to submit relevant or correct facts

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

#### S3.I. Maintaining a copy of this permit

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

#### S4. Operation and maintenance

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out according to the approved O&M manual or as otherwise approved by Ecology.

#### S4.A. Operations and maintenance (O&M) manual

#### a. O&M manual submittal and requirements

The Permittee must:

- i. Review the O&M Manual at least annually.
- ii. Submit to Ecology for review substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
- iii. Keep the approved O&M Manual at the permitted facility.
- iv. Follow the instructions and procedures of this manual.

#### b. O&M manual components

The O&M Manual must include:

- i. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
- ii. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
- iii. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

- iv. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
- v. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
- vi. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
- vii. Treatment plant process control monitoring schedule.

#### c. Treatment system operating plan

The Permittee must summarize the following information in the initial chapter of the O&M Manual entitled the "Treatment System Operating Plan." For the purposes of this permit, a Treatment System Operating Plan (TSOP) is a concise summary of specifically defined elements of the O&M Manual.

The Permittee must submit an updated Treatment System Operating Plan to Ecology by December 8, 2019. The Permittee must update and submit this plan, as necessary, to include requirements for any major modifications of the treatment system.

The TSOP must not conflict with the O&M Manual and must include the following information:

- i. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limits of S1 at the production levels used in developing these limits.
- ii. In the event of production rates, which are below the baseline levels used to establish these limits, the plan must describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting must be described in the plan.
- iii. In the event of an upset, due to plant maintenance activities, severe stormwater events, startups or shut downs, or other causes, the plan must describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting must be described in the plan.
- iv. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

#### S4.B. Bypass procedures

This permit prohibits a bypass, which is the intentional diversion of waste streams from any portion of a treatment facility.

Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance of this permit.

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. No feasible alternatives to the bypass exist, such as:
  - The use of auxiliary treatment facilities.
  - Retention of untreated wastes.
  - Stopping production.
  - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
  - Transport of untreated wastes to another treatment facility.
- c. The Permittee has properly notified Ecology of the bypass as required in Special Condition S3.F of this permit.
- 3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
  - a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
    - A description of the bypass and its cause.
    - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.

- A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.
- The projected date of bypass initiation.
- A statement of compliance with SEPA.
- A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
- Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
  - If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

#### S5. Solid wastes

#### S5.A. Solid waste handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

#### S5.B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC.

#### **S6.** Application for permit renewal

The Permittee must submit an application for renewal of this permit by December 8, 2019.

The Permittee must also submit a new application or addendum at least sixty (60) days prior to commencement of discharges, resulting from the activities listed below, which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

#### S7. Non-routine and unanticipated wastewater

- 1. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater or unanticipated wastewater and therefore not listed on the permit application, on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and, **at a minimum**, provide the following information:
  - a. The proposed discharge location.
  - b. The nature of the activity that will generate the discharge.
  - c. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  - d. The total volume of water it expects to discharge.
  - e. The results of the chemical analysis of the water.
  - f. The date of proposed discharge.
  - g. The expected rate of discharge discharged, in gallons per minute.
- 2. The Permittee must analyze the water for all constituents limited for the discharge and report them as required by subpart 1.e above. The analysis must also include any parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Special Condition S1 of this permit, water quality standards, and any other limits imposed by Ecology.
- 3. The Permittee must limit the discharge rate, as referenced in subpart 1.g above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

4. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

#### S8. Spill control plan

#### S8.A. Spill control plan submittals and requirements

The Permittee must:

- 1. Submit to Ecology an update to the existing spill control plan for the main terminal, the dock (pier 15), and manifold areas by October 15, 2016.
- 2. Review the plan at least annually and update the spill plan as needed.
- 3. Send changes to the plan to Ecology.
- 4. Follow the plan and any supplements throughout the term of the permit.

#### S8.B. Spill control plan components

The spill control plan must include the following for both the main terminal, the dock and manifold areas:

- 1. A list of all oil and petroleum products and other materials used and/or stored on-site, which when spilled, or otherwise released into the environment, designate as dangerous waste (DW) or extremely hazardous waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on-site which may become pollutants or cause pollution upon reaching state's waters.
- 2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- 3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
- 4. A description of operator training to implement the plan.

The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies, which meet the intent of this section.

#### **S9.** Stormwater pollution prevention plan

The Permittee must submit to Ecology an update to the existing stormwater pollution prevention plan (SWPPP) no later than:

- 1. October 15, 2016, to include stormwater management in the shoreline manifold and dock areas.
- 2. December 8, 2019, with the application for permit reissuance required in Special Condition S6 of the permit.

The Permittee must modify the existing SWPPP whenever there is a change in BMPs, operation or maintenance procedures. If it is necessary to achieve compliance with the effluent limits and benchmark values listed in S1 of the permit, the Permittee must make appropriate revisions to the SWPPP to include additional Treatment BMPs. BMPs in the SWPPP must be at least as effective as in controlling pollutants as those listed in Ecology's *Stormwater Management Manual for Western Washington*.

Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate for achieving compliance with the limits and benchmark values, the SWPPP must be modified, as appropriate, within two (2) weeks of such determination. The Permittee must provide for implementation of any modifications to the SWPPP in a timely manner.

#### S10. Best management practices

The Permittee must achieve compliance with the following BMPs.

#### S10.A. Dock and shoreline manifold areas

- 1. Best Management Practices must be employed on the dock facilities to collect oil spillage when making and breaking hose connections, and to prevent spillage from all hoses, hose reels, and filler nozzles. Inspections must include visual examination for evidence of deteriorating of pipelines, pumps, valves, seals, and fittings. Containment and other specialized oil cleanup equipment must be available at the dock at all times for immediate emergency use.
- 2. Once during each pipeline receipt from the dock by barge or via Olympic Pipeline, a walk-through inspection must be conducted of the transfer line starting from the dock manifold area and proceeding to the individual tank during the transfer process.
- 3. A daily inspection must be conducted in the dock and shoreline manifold areas for leaks and spills.
- 4. Water containing an oily sheen must not be released onto the ground surface. Any oily sheen observed on water in secondary containment in the shoreline manifold area must be removed by a) absorbents or skimming prior to release, or b) transporting it to the carbon treatment system in the main terminal for treatment prior to discharge through Outfall 001, or c) hauling it off-site for proper disposal. A daily inspection log, and records or manifests for the oily water disposal, must be kept on-site and made available for inspection.
- 5. In the event of an accidental discharge of oil, chemicals, toxic, or hazardous materials into waters of the state or onto land with a potential for entry into state waters, including groundwater, representatives of the Northwest Regional Office Spill Response Team must be notified immediately (within 24 hours) at (425) 649-7000.

A written spill report must be submitted to the Department of Ecology, Water Quality Program, within five (5) days of the time the Permittee becomes aware of the circumstances, unless Ecology waives or extends this requirement on a case-by-case basis.

#### S10.B. Main terminal and tank farm

- The oil/water separators must be inspected on a weekly basis at minimum and maintained as needed to ensure satisfactory performance. Oil sludge must be disposed of in a manner that will not cause water quality degradation to state waters. A record of inspection, maintenance, and disposal must be kept on file and available for review by Ecology.
- 2. All stormwater runoff from the containment tank farm must be directed to the existing oil/water separator for treatment prior to discharge. Stormwater runoff from the product transfer area must be collected and treated through an activated carbon system prior to discharge to the main oil/water separator.
- 3. All detergent washing of vehicles must be conducted on established wash racks which drain into the sanitary sewer.
- 4. In the event of an accidental discharge of oil, chemicals, toxic, or hazardous materials into waters of the state or onto land with a potential for entry into state waters, including groundwater, representatives of the Northwest Regional Office Spill Response Team must be notified immediately (within 24 hours) at (425) 649-7000.
  - A written spill report must be submitted to the Department of Ecology, Water Quality Program, within five (5) days of the time the Permittee becomes aware of the circumstances, unless Ecology waives or extends this requirement on a case-by-case basis.
- 5. No emulsifiers or dispersants, fire suppression foam agents, or associated wash water must be released to the oil/water separators.
- 6. Contained, collected, or accumulated oils and solvents must be discharged directly to the waste oil tank and not discharged to the oil/water separators or any sewer systems. Records or manifests for the waste oil disposal (hauling) must be kept on-site and made available for inspection.
- 7. For loading and unloading operations, inspections must be used to ensure that the transfer of material is complete before flexible or fixed transfer lines are disconnected prior to vehicular departure. The Permittee is responsible to ensure the operators have adequate training and understanding to conduct loading and unloading operations. Before any tank car or tank truck is filled, the lower-most drain valve and all outlets of such vehicles must be closely examined for evidence of leakage and, if necessary, tightened, adjusted, or replaced. Before departure, all tank cars or tank trucks must be closely examined to ensure that all transfer lines are disconnected, and that there is no evidence of leakage from any outlet.
- 8. Emergency equipment and supplies for spill control or firefighting must be inspected to ensure that equipment is in good condition and supplies are adequate.
- 9. Qualified plant personnel must be identified to inspect designated equipment and plant areas. Typical inspections must include examination of pipes, pumps, tanks, supports, foundations, dikes, and drainage ditches. Records must be kept to determine if changes in preventive maintenance or good housekeeping procedures are necessary.

- 10. All process water (stormwater) getting into the loading rack area, intermittent spillage in the loading racks, railcar drip pans, intermittent water drawn from product tanks, water used to test pipelines and hoses (hydrotest water) must be hauled off-site for proper disposal, or properly treated to meet the limits and benchmark values listed in S1 of the permit.
- 11. A daily inspection must be conducted in the tank farm for leaks and spills.
- 12. Sludges, scales, and sediments from tanks must be disposed of in an approved manner other than to waters of the state, and other than to the sanitary sewer system.
- 13. All barrels, drums, or similar containers containing toxic or deleterious materials, including, but not limited to, petroleum products, organic solvents, resins, strong acids and bases, cyanides, and heavy metal salts, must be stored in an upright position, in a bermed, covered area sufficient to prevent discharge into state ground or surface waters in the event of leakage or rupture.
- 14. Empty barrels must be stored with all openings plugged, in an upright position, and at least twenty feet from a storm drain.
- 15. Best Management Practices must be employed on-site to reduce dust and debris by sweeping the area impacted by heavy vehicle traffic whenever weather permits.

#### S11. Corrective actions

#### S11.A. Level 1 Corrective Actions – operational source control BMPs

Permittees that exceed any applicable *benchmark* value(s) in S1 for any quarters must complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following:

- 1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter, or the end of the quarter, whichever is later:
  - a. Conduct an inspection to investigate the cause.
  - b. Review the SWPPP and ensure that it fully complies with Permit Condition S10, and contains the correct BMPs from the applicable *Stormwater Management Manual*.
  - c. Make appropriate revisions to the SWPPP to include additional *Operational Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges.
- 2. Summarize the Level 1 Corrective Actions in an Annual Report (S3.C).
- 3. **Level One Deadline:** The Permittee must sign/certify and fully implement the revised SWPPP according to Permit Condition S9 and the applicable *Stormwater Management Manual* as soon as possible, but no later than the DMR due date for the quarter the *benchmark* was exceeded.

#### S11.B. Level 2 Corrective Actions – structural source control BMPs

Permittees that exceed an applicable *benchmark* value in S1 (for a single parameter) for any two quarters during a calendar year must complete a Level 2 Corrective Action. Alternatively, the Permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S11.C.

- 1. Review the SWPPP and ensure that it fully complies with Permit Condition S9 and S10.
- 2. Make appropriate revisions to the SWPPP to include additional *Structural Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges.
- 3. Summarize the Level 2 Corrective Actions (planned or taken) in the annual report (S3.C).
- 4. **Level 2 Deadline:** The Permittee must sign/certify and fully implement the revised SWPPP according to Permit Condition S9 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31<sup>st</sup> the following year.
  - a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31<sup>st</sup> the following year, *Ecology* may approve additional time upon request by the Permittee.
  - b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* upon request by the Permittee.
  - c. To request a time extension or waiver, a Permittee must submit a detailed explanation of why it is making the request (technical basis), by May 15<sup>th</sup> prior to Level 2 Deadline.
  - d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
  - e. For the year following the calendar year the Permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

#### S11.C. Level 3 Corrective Actions - treatment BMPs

Permittees that exceed an applicable *benchmark* value in S1 (for a single parameter) for any three quarters during a calendar year must complete a Level 3 Corrective Action.

- 1. Review the SWPPP and ensure that it fully complies with Permit Condition S10.
- 2. Make appropriate revisions to the SWPPP to include additional *Treatment BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. Revisions must include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*.

A *Qualified Industrial Stormwater Professional* must review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the permit benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet the benchmarks upon implementation.

- 3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater; the Permittee must submit an engineering report to Ecology for review.
  - a. The engineering report must include:
    - i. Brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
    - ii. The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
    - A description of the treatment process and operation, including a flow diagram;
    - iv. The amount and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;
    - v. Results to be expected from the treatment process including the predicted stormwater discharge characteristics;
    - vi. A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
    - vii. Certification by a licensed professional engineer.
  - b. The engineering report must be submitted no later than the May 15<sup>th</sup> prior to the Level 3 deadline, unless an alternate due date is specified in an order.
  - c. An Operation and Maintenance Manual (O&M Manual) must be submitted to Ecology no later than 30 days after construction/installation is complete; unless an alternate due date is specified in an order.
- 4. Summarize the Level 3 Corrective Actions (planned or taken) in the annual report (S3.C). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.
- 5. **Level 3 Deadline**: The Permittee must sign/certify and fully implement the revised SWPPP according to Permit Condition S9 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30<sup>th</sup> the following year.
  - a. If installation of necessary Treatment BMPs is not feasible by the Level 3 Deadline; Ecology may approve additional time upon request by the Permittee.

- b. If installation of Treatment BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, Ecology may waive the requirement for *Treatment BMPs* upon request by the Permittee.
- c. To request a time extension or waiver, a Permittee must submit a detailed explanation of why it is making the request (technical basis), by May 15<sup>th</sup> prior to the Level 3 Deadline. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
- d. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

#### S12. Acute toxicity

#### S12.A. Effluent testing

The Permittee must:

- Conduct acute toxicity testing on final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.
- 2. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
- 3. Submit the results to Ecology by December 8, 2019 (with the permit renewal application.
- 4. Use each of the following species and protocols for each acute toxicity test:

Acute Toxicity Tests	Species	Method
Fathead minnow 96-hour static-renewal test	Pimephales promelas	EPA-821-R-02-012
Daphnid 48-hour static test	Ceriodaphnia dubia, Daphnia pulex, or Daphnia magna	EPA-821-R-02-012

#### S12.B. Sampling and reporting requirements

- The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
- The Permittee must collect 24-hour composite effluent samples or grab samples for toxicity testing. The Permittee must cool the samples to 0 6 degrees Celsius during collection and send them to the laboratory immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

- The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
- All toxicity tests must meet quality assurance criteria and test conditions specified
  in the most recent versions of the EPA methods (Appendix H, EPA/600/4-89/001)
  and the Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole
  Effluent Toxicity Test Review Criteria. If Ecology determines any test results to
  be invalid or anomalous, the Permittee must repeat the testing with freshly
  collected effluent.
- The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in S12.A.3, or pristine natural water of sufficient quality for good control performance.
- The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 100% effluent.
- All whole effluent toxicity tests, effluent screening tests, and rapid screening tests
  that involve hypothesis testing must comply with the acute statistical power
  standard of 29% as defined in WAC 173-205-020. If the test does not meet the
  power standard, the Permittee must repeat the test on a fresh sample with an
  increased number of replicates to increase the power.

#### S13. Chronic toxicity

#### S13.A. Effluent testing

The Permittee must:

- Conduct chronic toxicity testing on final effluent once in the last winter and once in the last summer prior to submission of the application for permit renewal.
- Conduct chronic toxicity testing on a series of at least five dilations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 100% effluent. The series of dilutions should also contain the CCEC of 100% effluent.
- Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
- Submit the results to Ecology by December 8, 2019 (with the permit renewal application).
- Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

Saltwater Chronic Test	Species	Method	
Topsmelt survival and growth	Atherinops affinis	EPA/600/R-95/136	
Mysid shrimp survival and growth	Americamysis bahia	EPA-821-R-02-014	
	(formerly <i>Mysidopsis bahia</i> )		

#### S13.B. Sampling and reporting requirements

- 1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
- 2. The Permittee must collect 24-hour composite effluent samples or grab samples for toxicity testing. The Permittee must cool the samples to 0 6 degrees Celsius during collection and send them to the laboratory immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
- 3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
- 4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods (Appendix H, EPA/600/4-89/001) and the Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
- 5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in S13.A, or pristine natural water of sufficient quality for good control performance.
- 6. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 100% effluent. The ACEC equals 100% effluent.
- 7. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

#### S14. Compliance schedule for Outfall 002

By the dates tabulated below, the Permittee must complete the following tasks and submit a report describing, at a minimum:

• Whether it completed the task and, if not, the date on which it expects to complete the task.

• The reasons for delay and the steps it is taking to return the project to the established schedule.

	Tasks	Date Due
1	Submit an AKART study for outfall 002 which consists of an evaluation of the effectiveness of the existing treatment system and BMPs to attain the effluent limits and benchmark values listed in S1 of the permit, and proposed treatment options and/or BMPs to attain those limits and benchmarks. AKART defines as all known available reasonable treatment.	January 31, 2018
2	Submit an engineering report for the selected treatment system meeting the requirements listed under WAC 173-240-010 through 180 (Once the AKART study is approved, and if a treatment option has been selected, the Permittee has a period of six months to complete the design including plans and specifications for the proposed treatment system. Such work should be presented in the engineering report.)	July 31, 2018
3	Construction for the treatment system and/or implementation of BMPs.	April 30, 2019
4	Startup and final adjustment of the treatment system and/or BMPs.	June 30, 2019

#### **General Conditions**

#### **G1.** Signatory requirements

- 1. All applications, reports, or information submitted to Ecology must be signed and certified.
  - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
    - ii. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - b. In the case of a partnership, by a general partner.
  - c. In the case of sole proprietorship, by the proprietor.
  - d. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

- 2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to Ecology.
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

- 3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 4. Certification. Any person signing a document under this section must make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### G2. Right of inspection and entry

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- 1. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- 2. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- 3. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- 4. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

#### **G3.** Permit actions

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- 1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - a. Violation of any permit term or condition.
  - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - c. A material change in quantity or type of waste disposal.

- d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
- e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
- f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
- g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- 2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
  - a. A material change in the condition of the waters of the state.
  - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  - f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  - g. Incorporation of an approved local pretreatment program into a municipality's permit.
- 3. The following are causes for modification or alternatively revocation and reissuance:
  - a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  - b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

#### **G4.** Reporting planned changes

The Permittee must, as soon as possible, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

1. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).

- 2. A significant change in the nature or an increase in quantity of pollutants discharged.
- 3. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### G5. Plan review required

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

#### **G6.** Compliance with other laws and statutes

Nothing in this permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### G7. Transfer of this permit

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

1. Transfers by Modification

Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

#### 2. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- a. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.
- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

#### **G8.** Reduced production for compliance

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

#### **G9.** Removed substances

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

#### G10. Duty to provide information

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

#### G11. Other requirements of 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

#### **G12.** Additional monitoring

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

#### G13. Payment of fees

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

#### G14. Penalties for violating permit conditions

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

#### G15. Upset

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- An upset occurred and that the Permittee can identify the cause(s) of the upset.
- The permitted facility was being properly operated at the time of the upset.
- The Permittee submitted notice of the upset as required in Special Condition S3.G.
- The Permittee complied with any remedial measures required under S3.G of this permit.

In any enforcement action the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### G16. Property rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### G17. Duty to comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### G18. Toxic pollutants

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### **G19.** Penalties for tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two (2) years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

## G20. Reporting requirements applicable to existing manufacturing, commercial, mining, and silvicultural dischargers

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- 1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - a. One hundred micrograms per liter (100  $\mu$ g/L).
  - b. Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).
- 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - a. Five hundred micrograms per liter (500  $\mu$ g/L).
  - b. One milligram per liter (1 mg/L) for antimony.
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).

#### **G21.** Compliance schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than fourteen (14) days following each schedule date.

#### Appendix A

#### LIST OF POLLUTANTS WITH ANALYTICAL METHODS, DETECTION LIMITS AND QUANTITATION LEVELS

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136.

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

When the permit requires the Permittee to measure the base neutral compounds in the list of priority pollutants, it must measure all of the base neutral pollutants listed in the table below. The list includes EPA required base neutral priority pollutants and several additional polynuclear aromatic hydrocarbons (PAHs). The Water Quality Program added several PAHs to the list of base neutrals below from Ecology's Persistent Bioaccumulative Toxics (PBT) List. It only added those PBT parameters of interest to Appendix A that did not increase the overall cost of analysis unreasonably.

Ecology added this appendix to the permit in order to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit Appendix A list does not include those parameters.

#### **CONVENTIONAL POLLUTANTS**

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B <sup>3</sup>		2 mg/L
Fecal Coliform		SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H+B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

#### **NONCONVENTIONAL POLLUTANTS**

Pollutant & CAS No. (if available)	CAS Number (if available)		Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO3
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH3-B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-CI B/C/D/E		Sample and
		and SM4110 B		limit dependent
Chlorine, Total Residual		SM4500 CI G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO3
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N <sub>org</sub> B/C and SM4500NH <sub>3</sub> - B/C/D/EF/G/H		300
NWTPH Dx <sup>4</sup>		Ecology NWTPH Dx	250	250
NWTPH Gx <sup>5</sup>		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO <sub>4</sub> )		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S <sup>2</sup> F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO <sub>3</sub> )		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or use micro-recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B,	N/A	Specified in
		9223B		method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

PRIORITY POLLUTANTS	PP#	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> μg/L unless specified	Quantitation Level (QL) <sup>2</sup> μg/L unless specified					
<b>METALS, CYANIDE &amp; TOTAL PHENOL</b>	METALS, CYANIDE & TOTAL PHENOLS									
Antimony, Total	114	7440-36-0	200.8	0.3	1.0					
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5					
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5					
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25					
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2					
Chromium, Total	119	7440-47-3	200.8	0.2	1.0					
Copper, Total	120	7440-50-8	200.8	0.4	2.0					
Lead, Total	122	7439-92-1	200.8	0.1	0.5					
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005					
Nickel, Total	124	7440-02-0	200.8	0.1	0.5					
Selenium, Total	125	7782-49-2	200.8	1.0	1.0					
Silver, Total	126	7440-22-4	200.8	0.04	0.2					
Thallium, Total	127	7440-28-0	200.8	0.09	0.36					
Zinc, Total	128	7440-66-6	200.8	0.5	2.5					
Cyanide, Total	121	57-12-5	335.4	5	10					
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10					
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10					
Phenols, Total	65		EPA 420.1		50					

PRIORITY POLLUTANTS	PP#		Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
ACID COMPOUNDS					
2-Chlorophenol	24	95-57-8	625	1.0	2.0
2,4-Dichlorophenol	31	120-83-2	625	0.5	1.0
2,4-Dimethylphenol	34	105-67-9	625	0.5	1.0
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625/1625B	1.0	2.0
2,4 dinitrophenol	59	51-28-5	625	1.0	2.0
2-Nitrophenol	57	88-75-5	625	0.5	1.0
4-Nitrophenol	58	100-02-7	625	0.5	1.0
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625	1.0	2.0
Pentachlorophenol	64	87-86-5	625	0.5	1.0
Phenol	65	108-95-2	625	2.0	4.0
2,4,6-Trichlorophenol	21	88-06-2	625	2.0	4.0

PRIORITY POLLUTANTS	PP#	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified		
VOLATILE COMPOUNDS							
Acrolein	2	107-02-8	624	5	10		
Acrylonitrile	3	107-13-1	624	1.0	2.0		
Benzene	4	71-43-2	624	1.0	2.0		
Bromoform	47	75-25-2	624	1.0	2.0		

PRIORITY POLLUTANTS	PP#	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified				
VOLATILE COMPOUNDS									
Carbon tetrachloride	6	56-23-5	624/601 or SM6230B	1.0	2.0				
Chlorobenzene	7	108-90-7	624	1.0	2.0				
Chloroethane	16	75-00-3	624/601	1.0	2.0				
2-Chloroethylvinyl Ether	19	110-75-8	624	1.0	2.0				
Chloroform	23	67-66-3	624 or SM6210B	1.0	2.0				
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624	1.0	2.0				
1,2-Dichlorobenzene	25	95-50-1	624	1.9	7.6				
1,3-Dichlorobenzene	26	541-73-1	624	1.9	7.6				
1,4-Dichlorobenzene	27	106-46-7	624	4.4	17.6				
Dichlorobromomethane	48	75-27-4	624	1.0	2.0				
1,1-Dichloroethane	13	75-34-3	624	1.0	2.0				
1,2-Dichloroethane	10	107-06-2	624	1.0	2.0				
1,1-Dichloroethylene	29	75-35-4	624	1.0	2.0				
1,2-Dichloropropane	32	78-87-5	624	1.0	2.0				
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) <sup>6</sup>	33	542-75-6	624	1.0	2.0				
Ethylbenzene	38	100-41-4	624	1.0	2.0				
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0				
Methyl chloride (Chloromethane)	45	74-87-3	624	1.0	2.0				
Methylene chloride	44	75-09-2	624	5.0	10.0				
1,1,2,2-Tetrachloroethane	15	79-34-5	624	1.9	2.0				
Tetrachloroethylene	85	127-18-4	624	1.0	2.0				
Toluene	86	108-88-3	624	1.0	2.0				
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624	1.0	2.0				
1,1,1-Trichloroethane	11	71-55-6	624	1.0	2.0				
1,1,2-Trichloroethane	14	79-00-5	624	1.0	2.0				
Trichloroethylene	87	79-01-6	624	1.0	2.0				
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0				

PRIORITY POLLUTANTS	PP#	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> μg/L unless specified
BASE/NEUTRAL COMPOUNDS (comp	ounds	in bold are E	cology PBTs)		
Acenaphthene	1	83-32-9	625	0.2	0.4
Acenaphthylene	77	208-96-8	625	0.3	0.6
Anthracene	78	120-12-7	625	0.3	0.6
Benzidine	5	92-87-5	625	12	24
Benzyl butyl phthalate	67	85-68-7	625	0.3	0.6
Benzo(a)anthracene	72	56-55-3	625	0.3	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) <sup>7</sup>	74	205-99-2	610/625	0.8	1.6
Benzo(j)fluoranthene 7		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) <sup>7</sup>	75	207-08-9	610/625	0.8	1.6

PRIORITY POLLUTANTS	PP#	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ μg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified				
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)									
Benzo(r,s,t)pentaphene		189-55-9	625	0.5	1.0				
Benzo(a)pyrene	73	50-32-8	610/625	0.5	1.0				
Benzo(ghi)Perylene	79	191-24-2	610/625	0.5	1.0				
Bis(2-chloroethoxy)methane	43	111-91-1	625	5.3	21.2				
Bis(2-chloroethyl)ether	18	111-44-4	611/625	0.3	1.0				
Bis(2-chloroisopropyl)ether	42	39638-32-9	625	0.3	0.6				
Bis(2-ethylhexyl)phthalate	66	117-81-7	625	0.1	0.5				
4-Bromophenyl phenyl ether	41	101-55-3	625	0.2	0.4				
2-Chloronaphthalene	20	91-58-7	625	0.3	0.6				
4-Chlorophenyl phenyl ether	40	7005-72-3	625	0.3	0.5				
Chrysene	76	218-01-9	610/625	0.3	0.6				
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0				
Dibenzo (a,j)acridine		224-42-0	610M/625M	2.5	10.0				
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625	0.8	1.6				
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0				
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0				
3,3-Dichlorobenzidine	28	91-94-1	605/625	0.5	1.0				
Diethyl phthalate	70	84-66-2	625	1.9	7.6				
Dimethyl phthalate	71	131-11-3	625	1.6	6.4				
Di-n-butyl phthalate	68	84-74-2	625	0.5	1.0				
2,4-dinitrotoluene	35	121-14-2	609/625	0.2	0.4				
2,6-dinitrotoluene	36	606-20-2	609/625	0.2	0.4				
Di-n-octyl phthalate	69	117-84-0	625	0.3	0.6				
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B	5.0	20				
Fluoranthene	39	206-44-0	625	0.3	0.6				
Fluorene	80	86-73-7	625	0.3	0.6				
Hexachlorobenzene	9	118-74-1	612/625	0.3	0.6				
Hexachlorobutadiene	52	87-68-3	625	0.5	1.0				
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	0.5	1.0				
Hexachloroethane	12	67-72-1	625	0.5	1.0				
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625	0.5	1.0				
Isophorone	54	78-59-1	625	0.5	1.0				
3-Methyl cholanthrene		56-49-5	625	2.0	8.0				
Naphthalene	55	91-20-3	625	0.3	0.6				
Nitrobenzene	56	98-95-3	625	0.5	1.0				
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0				
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0				
N-Nitrosodiphenylamine	62	86-30-6	625	0.5	1.0				
Perylene		198-55-0	625	1.9	7.6				
Phenanthrene	81	85-01-8	625	0.3	0.6				
Pyrene	84	129-00-0	625	0.3	0.6				
1,2,4-Trichlorobenzene	8	120-82-1	625	0.3	0.6				

PRIORITY POLLUTANT		CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified			
DIOXIN								
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L			

PRIORITY POLLUTANTS	PP#		Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless  specified	Quantitation Level (QL) <sup>2</sup> μg/L unless specified				
PESTICIDES/PCBs									
Aldrin	89	309-00-2	608	0.025	0.05				
alpha-BHC	102	319-84-6	608	0.025	0.05				
beta-BHC	103	319-85-7	608	0.025	0.05				
gamma-BHC (Lindane)	104	58-89-9	608	0.025	0.05				
delta-BHC	105	319-86-8	608	0.025	0.05				
Chlordane 8	91	57-74-9	608	0.025	0.05				
4,4'-DDT	92	50-29-3	608	0.025	0.05				
4,4'-DDE	93	72-55-9	608	0.025	0.05				
4,4' DDD	94	72-54-8	608	0.025	0.05				
Dieldrin	90	60-57-1	608	0.025	0.05				
alpha-Endosulfan	95	959-98-8	608	0.025	0.05				
beta-Endosulfan	96	33213-65-9	608	0.025	0.05				
Endosulfan Sulfate	97	1031-07-8	608	0.025	0.05				
Endrin	98	72-20-8	608	0.025	0.05				
Endrin Aldehyde	99	7421-93-4	608	0.025	0.05				
Heptachlor	100	76-44-8	608	0.025	0.05				
Heptachlor Epoxide	101	1024-57-3	608	0.025	0.05				
PCB-1242 <sup>9</sup>	106	53469-21-9	608	0.25	0.5				
PCB-1254	107	11097-69-1	608	0.25	0.5				
PCB-1221	108	11104-28-2	608	0.25	0.5				
PCB-1232	109	11141-16-5	608	0.25	0.5				
PCB-1248	110	12672-29-6	608	0.25	0.5				
PCB-1260	111	11096-82-5	608	0.13	0.5				
PCB-1016 <sup>9</sup>	112	12674-11-2	608	0.13	0.5				
Toxaphene	113	8001-35-2	608	0.24	0.5				

- 1. <u>Detection level (DL)</u> or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
- 2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10<sup>n</sup>, where n is an integer (64 FR 30417). ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agenc,y December 2007).

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- 3. <u>Soluble Biochemical Oxygen Demand</u> method note: First, filter the sample through a Millipore Nylon filter (or equivalent) pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.
- 4. <u>NWTPH Dx</u>-Northwest Total Petroleum Hydrocarbons Diesel Extended Range see <a href="http://www.ecy.wa.gov/biblio/97602.html">http://www.ecy.wa.gov/biblio/97602.html</a>
- 5. <u>NWTPH Gx</u> Northwest Total Petroleum Hydrocarbons Gasoline Extended Range see http://www.ecv.wa.gov/biblio/97602.html
- 6. <u>1, 3-dichloroproylene (mixed isomers)</u> You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
- 7. <u>Total Benzofluoranthenes</u> Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
- 8. <u>Chlordane</u> You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 0.025/0.050.
- 9. PCB 1016 & PCB 1242 You may report these two PCB compounds as one parameter called PCB 1016/1242.